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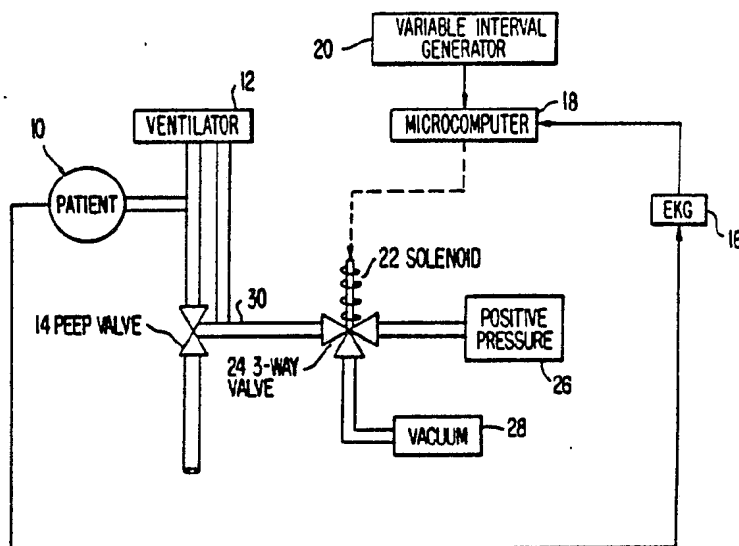
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## (54) Computer gated positive expiratory pressure system

(57) The use of Positive-End-Expiratory Pressure (PEEP) systems result in decreased cardiac output and decreased regional blood flow because the heart is surrounded by higher than usual pressure (elevated intrathoracic pressure). The invention lowers intrathoracic pressure selectively during a small portion of the heart cycle when it causes its greatest detriment. The invention lowers thoracic pressure by providing a low pressure source to the PEEP valve (14). Included in the invention are a sensing means (16) for sensing sequential heart beats of a patient, together with a computing means (18), which is connected to the sensing means (16), for computing a period between the sequential heart beats. In addition, a valve means (24) is connected electrically to the computing means (18) and pneumatically to ventilator means (12) for controlling the ventilator means (12), with the valve means (24) being positioned to cease supply of positive pressure in response to the computed period.



GB 2 194 892 A